

**No. 23-3026**

---

IN THE UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT

---

**CENTER FOR BIOLOGICAL DIVERSITY;**

*Plaintiff-Appellant,*

v.

**UNITED STATES FISH AND WIDLIFE SERVICE;** and  
**DEBRA HAALAND**, in her official  
capacity as Secretary of the Interior;

*Defendants-Appellees,*

---

On Appeal from the United States District Court  
for the District of Arizona  
No. 4:22-cv-00286-JGZ  
Hon. Judge Jennifer G. Zipp

---

**BRIEF OF PLAINTIFF-APPELLANT**

---

Camila Cossío  
Center for Biological Diversity  
P.O. Box 11374  
Portland, OR 97211  
Telephone: (503) 283-5474  
ccossio@biologicaldiversity.org

Brian Segee  
Center for Biological Diversity  
226 W Ojai Ave., Ste. 101-442  
Ojai, CA 93023-3278  
Telephone: (805) 750-8852  
bsegee@biologicaldiversity.org

*Attorneys for Plaintiff-Appellant*

**CORPORATE DISCLOSURE STATEMENT**

Pursuant to Federal Rules of Appellate Procedure 26.1, Plaintiff Center for Biological Diversity states that it is a non-profit entity that has not issued shares to the public and that it has no affiliates, parent companies, or subsidiaries that issue shares to the public.

/s/ Camila Cossío  
Camila Cossío

*Attorney for Plaintiff-Appellant*

## **TABLE OF CONTENTS**

CORPORATE DISCLOSURE STATEMENT .....	i
TABLE OF AUTHORITIES .....	iv
JURISDICTIONAL STATEMENT .....	1
STATEMENT OF THE ISSUE.....	2
PERTINENT STATUTES AND REGULATIONS .....	4
STATEMENT OF THE CASE.....	5
A. 90-Day Findings Are the First Threshold Step in the Service’s Review of ESA Listing Petitions .....	5
B. The Tucson Shovel-Nosed Snake.....	7
C. The Center’s First Listing Petition (2004).....	10
1. <i>The Service’s 90-Day Finding (2008) and 12-Month Warranted But             Precluded Findings (2010-2014)</i> .....	10
2. <i>A USGS Study (Wood et al. 2014) Confirms That the Tucson Shovel-             Nosed Snake is a Valid Subspecies and Recommends Protection of Both             “Pure” and “Hybrid” Populations</i> .....	12
3. <i>The Service’s Reliance on Wood et al. (2014) to Reverse Position and             Find that Listing the Tucson Shovel-Nosed Snake Is Not Warranted             (2014)</i> .....	16
D. Scientific Critiques of the Service’s Not Warranted Finding and New Interpretations of Wood et al. (2014) .....	19
1. <i>Dr. Rosen’s “Five Problems” Analysis (2015)</i> .....	19
2. <i>Habitat and Conservation Status Study (Bradley &amp; Rosen (2020))</i> .....	22
E. The Center’s Second Listing Petition (2020) .....	23
F. The Challenged September 29, 2021, 90-Day Finding .....	23

G. The District Court’s Rejection of the Center’s Challenge to the Service’s Denial of Its Second Petition at the Initial 90-Day Finding Stage .....	24
SUMMARY OF ARGUMENT .....	26
STANDARD OF REVIEW .....	29
ARGUMENT .....	30
I. The Service Unlawfully Issued a Negative 90-Day Finding On the Center’s Second Petition Despite the Petition’s Inclusion of New, Substantial Information That Listing May Be Warranted.....	30
A. The Text, Structure, History, and Purpose of the Service’s Listing Petition Regulations Demonstrate That The “New Information” Standard Has Broad and Flexible Meaning .....	31
B. The Service’s Finding that the Center’s Second Petition Did Not Present New Information Regarding the Service’s Interpretation of the Wood et al. (2014) Study Conflicts with the Agency’s Own Explanation of its Regulation .....	34
C. The Service’s Finding that the Center’s Second Petition Did Not Present Substantial Information Regarding the Service’s Interpretation of Wood et al. (2014) Was Arbitrary .....	38
D. The Service’s Finding That the Center’s Second Petition Did Not Present New and Substantial Evidence Regarding New Interstate Highway Construction and Snake Fungal Disease Was Arbitrary .....	46
CONCLUSION .....	49
STATEMENT OF RELATED CASES .....	50
ADDENDUM .....	A1

## **TABLE OF AUTHORITIES**

### **Cases**

<i>Allentown Mack Sales &amp; Serv., Inc. v. NLRB</i> , 522 U.S. 359 (1998).....	37
<i>Anaheim Mem’l Hosp. v. Shalala</i> , 130 F.3d 845 (9th Cir. 1997) .....	30
<i>Attias v. Crandall</i> , 968 F.3d 931 (9th Cir. 2020) .....	30, 32
<i>Auer v. Robbins</i> , 519 U.S. 452 (1997).....	31
<i>Buffalo Field Campaign v. Zinke</i> , 289 F. Supp. 3d 103 (D.D.C. 2018).....	6, 39, 41, 44, 46
<i>Ctr. for Biological Diversity v. Kempthorne</i> , No. C 06-04186 WHA, 2007 U.S. Dist. LEXIS 4816 (N.D. Cal. Jan. 19, 2007) .....	39
<i>Ctr. for Biological Diversity v. Kempthorne</i> , No. CV 07-0038-PHX-MHM, 2008 U.S. Dist. LEXIS 17517 (D. Ariz. Mar. 5, 2008) .....	39
<i>Defs. of Wildlife v. U.S. Fish &amp; Wildlife Serv.</i> , 584 F. Supp. 3d 812 (N.D. Cal. 2022).....	36
<i>Guatay Christian Fellowship v. Cnty. of San Diego</i> , 670 F.3d 957 (9th Cir. 2011) .....	29
<i>Humane Soc’y of the U.S. v. Zinke</i> , 865 F.3d 585 (D.C. Cir. 2017) .....	8
<i>Kisor v. Wilkie</i> , 139 S. Ct. 2400 (2019).....	31, 32
<i>Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.</i> , 463 U.S. 29 (1983).....	29
<i>Organized Vill. of Kake v. U.S. Dep’t of Agric.</i> , 795 F.3d 956 (9th Cir. 2015) .....	29
<i>Tenn. Valley Auth. v. Hill</i> , 437 U.S. 153 (1978).....	5

<i>Turlock Irrigation Dist. v. FERC</i> , 903 F.3d 862 (9th Cir. 2018) .....	37
---	----

## **Statutes**

5 U.S.C. § 706.....	30
16 U.S.C. § 1531(b) .....	5
16 U.S.C. § 1532(16) .....	5
16 U.S.C. § 1533 .....	5, 43
16 U.S.C. § 1533(b)(3).....	5
16 U.S.C. § 1533(b)(3)(A) .....	5, 6, 31, 38
16 U.S.C. § 1533(b)(3)(B) .....	6, 38
16 U.S.C. § 1540(c) .....	1
16 U.S.C. § 1540(g) .....	1, 5
16 U.S.C. § 1533(b)(3)(D)(i) .....	2
28 U.S.C. § 1291 .....	1
28 U.S.C. § 1331 .....	1

## **Regulations**

50 C.F.R. § 424.14(h)(1) .....	31
50 C.F.R. § 424.14(h)(1)(i) .....	6, 31, 44
50 C.F.R. § 424.14(h)(1)(iii) .....	2, 7, 31, 38

## **Rules**

9th Cir. R. 28-2.7 .....	4
Fed. R. App. P. 28(f) .....	4
Fed. R. App. P. 3(d) .....	1

## **Other Authorities**

81 Fed. Reg. 66462 (Sept. 27, 2016) .....	passim
86 Fed. Reg. 53937 (Sept. 29, 2021) .....	23
Exec. Order 13563 (Jan. 16, 2011) .....	37

### **JURISDICTIONAL STATEMENT**

The district court had jurisdiction under 16 U.S.C. § 1540(c) and (g), based on the Endangered Species Act’s citizen suit provision, and 28 U.S.C. § 1331, based on federal question jurisdiction. The district court granted the U.S. Fish and Wildlife Service’s (“Service”) summary judgment motion and denied the Center for Biological Diversity’s (“Center”) summary judgment motion, entering a final order and judgment against the Center on August 23, 2023. 1-ER-2. On October 18, 2023, the Center filed a timely Notice of Appeal from the district court’s final order. 3-ER-350-352; *see* Fed. R. App. P. 3(d). This Court has jurisdiction pursuant to 28 U.S.C. § 1291.

## **STATEMENT OF THE ISSUE**

The Endangered Species Act (“ESA”) requires the Service to issue an initial finding on a petition to list a species within 90 days of receiving the petition (“90-day finding”). 16 U.S.C. § 1533(b)(3)(D)(i). At this threshold step in the statutory review process, the Service must issue a positive 90-day finding if there is substantial information indicating that listing may be warranted. *Id.* Where the Service has issued a final decision on a previous listing petition and there is a second petition on the same species, the second petition must also contain “new information not previously considered.” 50 C.F.R. § 424.14(h)(1)(iii). This case challenges the Service’s denial, at the initial 90-day finding stage, of the Center’s second petition to list the Tucson shovel-nosed snake (“the snake”).

The Center submitted its first petition to list the snake under the ESA in 2004. After initially determining that the snake warranted listing, the Service subsequently denied the petition in 2014, largely based on its interpretation of a 2014 U.S. Geological Service (“USGS”) genetic study by Dustin A. Wood et al., (hereafter “Wood et al. (2014)”). In 2020, the Center submitted a second petition to list the species, which incorporated subsequent scientific study and analysis presenting a different interpretation of Wood et al. (2014), while also containing information concerning proposed construction of a new interstate highway, snake fungal disease, and other emerging threats. In 2021, the Service issued a negative



90-day finding denying the second petition based on its determination that it did not include substantial new information. The district court upheld the Service's determination and denied the Center's challenge.

The sole issue on appeal is whether the Center's second petition presented new and substantial information, not previously considered, that shows listing the Tucson shovel-nosed snake may be warranted.

### **PERTINENT STATUTES AND REGULATIONS**

Pursuant to Fed. R. App. P. 28(f) and 9th Cir. R. 28-2.7, pertinent statutory and regulatory provisions appear in the attached Addendum.

## **STATEMENT OF THE CASE**

### **A. 90-Day Findings Are the First Threshold Step in the Service’s Review of ESA Listing Petitions**

The ESA is “the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). It is intended to “provide a means whereby the ecosystems upon which endangered species and threatened species may be conserved” and to “provide a program for the conservation of such ... species.” 16 U.S.C. § 1531(b).

A species must first be listed as either threatened or endangered to benefit from the ESA’s provisions. *Id.* § 1533. The ESA defines “species” as including “any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.” *Id.* § 1532(16). Any person may petition to list a species. *Id.* § 1540(g). The Service is required to follow specific steps for how it reviews a petition. *Id.* § 1533(b)(3).

The first step is the 90-day finding, where the Service reviews the petition to determine if it includes substantial information indicating that listing the species may be warranted. *Id.* § 1533(b)(3)(A). The Service reviews the information without conducting “a more wide-ranging collection of information and analysis.” 81 Fed. Reg. 66462, 66463 (Sept. 27, 2016).

The Service’s regulations define “substantial information” as information presented in the petition that “a reasonable person conducting an impartial

scientific review would conclude that the action proposed in the petition may be warranted.” 50 C.F.R. § 424.14(h)(1)(i). The burden of presenting “substantial” information is on the petitioner. 81 Fed. Reg. at 66472. The Service does not define “substantial” but explains that “substantial information” must be “credible.” “Credible,” in this context, may include “all types of data,” including “peer-reviewed literature, gray literature [not peer-reviewed], traditional ecological knowledge, etc.” *Id.*

The standard for a positive 90-day finding is “a relatively low threshold, requiring only that the petitioner provide information that listing may be warranted.” 2-ER-29; *see Buffalo Field Campaign v. Zinke*, 289 F. Supp. 3d 103, 106 (D.D.C. 2018) (the “substantial information” standard applied at the 90-day stage “is not a rigorous one.”).

If the Service finds the petition shows listing may be warranted, the Service “shall promptly commence a review of the status of the species concerned.” 16 U.S.C. § 1533(b)(3)(A). After the status review, the Service publishes a “12-month finding” with one of three listing determinations: (1) listing is “warranted”; (2) listing is “not warranted”; or (3) listing is “warranted but precluded.” *Id.* § 1533(b)(3)(B). The 12-month stage involves “in-depth status reviews and analyses using the best available science and information.” 2-ER-29. This is when the

Service conducts a full assessment of the petition’s merits along with public participation. 81 Fed. Reg. at 66474, 66475.

If there has been final agency action on a petition to list a species and there is a second petition on the same species, the “substantial information” in this situation must also be “new information not previously considered.” 50 C.F.R. § 424.14(h)(1)(iii). The Service has explained that “[n]ew information not previously considered” can be any information or analysis that was not evaluated in a previous finding, including a “new analysis” or “interpretation” of existing data such as a discovery and explanation of errors made by the Service in a prior finding. 81 Fed. Reg. at 66472, 66474, 66480.

**B. The Tucson Shovel-Nosed Snake**



The Tucson shovel-nosed snake. Photo courtesy of USGS.

The Western shovel-nosed snake (*Chionactis occipitalis*) is a non-venomous, small “snake occupying the arid valley floors and bajadas of the Mojave and Sonoran deserts in southwestern North America.” 3-ER-250. Shovel-nosed snakes are “sand swimmers,” adapted to using their eponymous snouts, valved nostrils, flattened belly, and smooth scales for locomotion and burrowing. 2-ER-173, 236. Until 2014, four subspecies<sup>1</sup> of Western shovel-nosed snake were “recognized on the basis of variation in banding pattern and coloration”: *C.o. occipitalis* (Mojave shovel-nosed snake); *C.o. annulata* (Colorado shovel-nosed snake); *C.o. talpina* (Nevada shovel-nosed snake); and *C.o. klauberi* (Tucson shovel-nosed snake). 3-ER-250.<sup>2</sup>

The Tucson subspecies, *klauberi*, was first recognized in 1941 and is distinguished by black and red stripes over a cream-colored body that mimics coral snakes. 2-ER-183. Its range has generally been described as extending from Tucson to Phoenix, including Pima County in the Avra and Santa Cruz valleys,

---

<sup>1</sup> In directing “the Service to evaluate the status of not just species, but subspecies and segments,” Congress signaled its “intent to target the Act’s provisions where needed, rather than to require the woodenly undifferentiated treatment of all members of a taxonomic species regardless of how their actual status and condition might change over time.” *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d 585, 598 (D.C. Cir. 2017).

<sup>2</sup> A 2014 taxonomic reclassification, discussed in detail in Section B.2, *infra*, affirmed the Tucson shovel-nosed snake as a valid subspecies while renaming it as *Chionactis annulata klauberi*.

western Pinal County, and a portion of eastern Maricopa County. 3-ER-340 (Mahrtdt et al. (2001)<sup>3</sup>); 3-ER-269; 3-ER-262-263 (Arizona Game and Fish Department 2010 species abstract); 3-ER-346 (Klauber (1951)<sup>4</sup> map depicting locality records of Western shovel-nosed snakes); 3-ER-347 (Klauber (1951) study calling the Tucson-Florence area “the *klauberi* headquarters.”).

The “Sun Corridor Megapolitan” completely encompasses this area and is undergoing some of the most rapid development and population growth in the country. 3-ER-270. Development, agriculture, and road construction have already resulted in the presumed extirpation of Tucson shovel-nosed snakes from Pima County. 3-ER-269, 262-266. Much of the remaining occupied habitat in southwestern Pinal County and eastern Maricopa County is located on Arizona State lands, which are commonly sold or leased for commercial or residential development. 3-ER-269. Additional threats including proposed freeway construction, snake fungal disease, wildfires driven by invasive species, off-road vehicle use, and climate change further imperil remaining populations. 2-ER-104, 111; 3-ER-325, 330.

---

<sup>3</sup> The full citation to this study is: C. R. Mahrtdt, et al., *Chionactis occipitalis*, in CATALOGUE OF AMERICAN AMPHIBIANS AND REPTILES 371.1-371.6 (2001).

<sup>4</sup> The full citation to this study is: Laurence M. Klauber, *The shovelnosed snake, Chionactis, with descriptions of two new subspecies*, 11 Trans. San Diego Soc. Nat. Hist. 131-204 (1951).

### **C. The Center’s First Listing Petition (2004)**

The Center submitted its first petition to list the Tucson shovel-nosed snake under the ESA on December 15, 2004. 3-ER-308-334. The petition relied extensively on studies and communications from the late Dr. Phil Rosen, a herpetologist and leading expert on shovel-nosed snakes. 3-ER-311-315, 318-325; *see, e.g.*, 3-ER-319 (“The models presented here are an extension of work with Dr. Rosen to model snake habitat by personnel working for Pima County’s Sonoran Desert Conservation Plan and the town of Marana’s Habitat Conservation Plan.”).

#### **1. *The Service’s 90-Day Finding (2008) and 12-Month Warranted But Precluded Findings (2010-2014)***

On July 29, 2008, the Service issued its long-overdue 90-day finding on the Center’s petition, determining that the listing may be warranted. 3-ER-283-288. Underscoring Dr. Rosen’s expertise on the subspecies, the finding includes 31 references to his studies and personal communications. *Id.* The Service noted that Dr. Rosen studied shovel-nosed snakes for 17 years, co-authored articles (including a peer-reviewed journal article and a literature review), developed habitat models, and “has been instrumental in ... the conservation of reptiles and amphibians in the southwestern United States.” 3-ER-286.

To inform the subsequent 12-month finding, the Service requested review and input on the snake’s taxonomic classification and geographic distribution from nine experts. 3-ER-268. Six experts—four herpetological taxonomists and two



shovel-nosed snake experts—provided comments. *Id.* The four taxonomists opined that the Tucson shovel-nosed snake subspecies classification could not be definitively supported based on recent genetic work that was done using mitochondrial DNA (“mtDNA”) alone. *Id.* Accordingly, three of the taxonomists and one of the species experts commented that additional genetic studies using nuclear DNA markers or microsatellites were needed to determine if the Tucson shovel-nosed snake was in fact a distinct subspecies and, if so, where the boundaries of its range were located. *Id.*

The experts recommended further study because mtDNA “reflects deep historical separation rather than more recent divergence, and does not reflect evolutionary difference shaped by the organism’s ecology and environment.” *Id.* In contrast, microsatellites are comprised of numerous short segments of DNA that are distributed throughout the genetic material of the organism, providing “a highly variable marker widely accepted as appropriate for detecting” more recent evolutionary differences. 3-ER-268-269.

Acknowledging “that uncertainty exists in both the taxonomic entity and subspecies range” of the Tucson shovel-nosed snake, and that “additional work is needed to clarify the validity and distribution of the subspecies,” the Service accepted the taxonomic status and distribution of the subspecies as described by Mahrtdt et al. (2001) as the best available science. 3-ER-269.

The Service concluded on March 31, 2010, that the snake warranted listing under the ESA based on its “limited geographic distribution” and because its “entire range lies within the path of future development,” but found that listing was “precluded by higher priority actions.” 3-ER-267, 275. The Service repeated the warranted but precluded determination in 2011, 2012, and in 2013. 2-ER-146.

**2. *A USGS Study (Wood et al. 2014) Confirms That the Tucson Shovel-Nosed Snake is a Valid Subspecies and Recommends Protection of Both “Pure” and “Hybrid” Populations***

Following the 2010 publication of the Service’s warranted finding, in the study by Wood et al. (2014),<sup>5</sup> USGS scientists implemented the expert recommendations contained in that finding by using both mtDNA and microsatellite genetic data to evaluate the taxonomy and geographic range of Western shovel-nosed snakes, with a particular emphasis on evaluating the genetic distinctiveness between Tucson shovel-nosed snakes and neighboring shovel-nosed snakes. 3-ER-249-261. The study found that the genetic data supports continued recognition of the Tucson shovel-nosed snake as a valid subspecies, while

---

<sup>5</sup> The full citation to this study is: Dustin A. Wood, Robert N. Fisher, & Amy G. Vandergast, *Fuzzy Boundaries: Color and Gene Flow Patterns among Parapatric Lineages of the Western Shovel-Nosed Snake and Taxonomic Implication*, 9(5) PLoS ONE e97494 (2014).

recommending a broader taxonomic reclassification within the Western shovel-nosed snake complex. 3-ER-249.<sup>6</sup>

In synthesizing the mtDNA and microsatellite markers, Wood et al. (2014) found that both sets of genetic data supported the existence of three Western shovel-nosed snake lineages: the Mojave, Colorado, and Sonoran lineages. 3-ER-253. Wood et al. (2014) also found that the three lineages had geographic boundaries that were largely consistent with the phenotypic (*i.e.*, color and physical variation) criteria used to historically define those boundaries. 3-ER-253. The Tucson shovel-nosed snake was placed in the “Sonoran lineage.” 3-ER-253,3254.

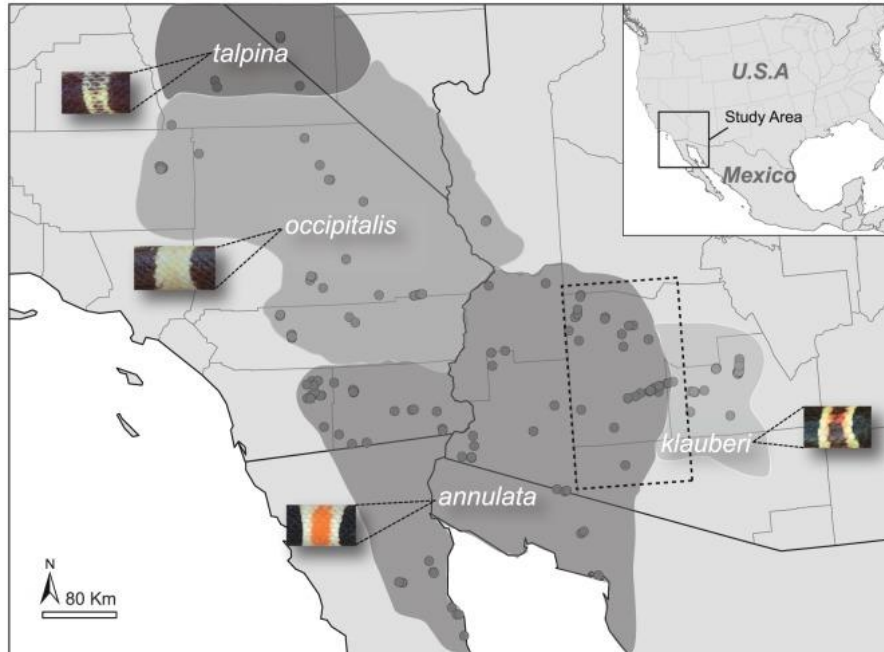
Wood et al. (2014) specifically noted that these three genetic lineages “have broadly concordant boundaries” with the recognized subspecies ranges based on color pattern. 3-ER-257. Emphasizing this general consistency between the genetic data and color distinctiveness of the snakes, Wood et al. (2014) proposed recognizing two new species within the Western shovel-nosed snake genus—the Mohave shovel-nosed snake, *Chionactis occipitalis*, and the Colorado Desert shovel-nosed snake, *C. annulata*. 3-ER-258. The authors further recommended

---

<sup>6</sup> The study found that Tucson shovel-nosed snake may in fact warrant full species designation, but the “current phenotypic and genetic data” available “allows neither definitive acceptance nor rejection” of this hypothesis. 3-ER-258.

including *klauberi* as a “subspecific designation within *C. annulata*,” thus renaming the subspecies *C. annulata klauberi*. 3-ER-258-259.

Scientists have recognized “taxonomic uncertainty” within Western shovel-nosed snakes since the species’ first descriptions, including “intergrade zones”—areas of overlap between the ranges of two subspecies where individuals may possess intermediate characters or traits of both species—that are difficult to “unambiguously assign” to either subspecies. 3-ER-250; 3-ER-290; 3-ER-255. In 1951, for example, herpetologist Laurence M. Klauber described intergradation between Tucson and Colorado shovel-nosed snakes as occurring as “far west as Gila Bend, north to Aguila, and south to Ajo.” 3-ER-347.



3-ER-251 (map from Wood et al. (2014) depicting generalized morphological subspecies ranges of *Chionactis occipitalis*. The dotted line depicts the intergradation zone between *annulata* and *klauberi*).

Reaffirming the same point made by Klauber in 1951, and as reflected in the study's title—*Fuzzy Boundaries*—Wood et al. (2014) found that the mtDNA and microsatellite genetic data demonstrated that Tucson and Colorado shovel-nosed snakes are “not genetically exclusive.” 3-ER-257. Wood et al. (2014) further concluded that contrary to the previous understanding of a broad intergrade zone between Tucson and Colorado shovel-nosed snakes, the genetic data instead identified a narrower zone composed of two specific regions of admixture “primarily restricted within central Arizona” in Maricopa County. 3-ER-257. Referring to the 1951 Klauber study describing localities in northwestern Maricopa County with “*klauberi* influences,” the authors concluded that the Tucson shovel-nosed snake's “western boundary may be more extensive than its previously assumed” boundary, which extended only to southeastern Maricopa County. *Id.*

Again, noting the overall consistency between the genetic data and coloration, Wood et al. (2014) concluded that “[g]iven the broad (but not exclusive) geographic cohesion found between the phenotypic and genetic variation” between Colorado and Tucson shovel-nosed snakes, “continued recognition of each may assist in preserving the potential for future evolutionary change within the species.” 3-ER-259. The authors closed the study by recommending that “protection of such diversity may best be achieved by

maintaining viable populations within these heterogeneous areas—both ‘pure’ and the hybrid populations.” *Id.*

**3. *The Service’s Reliance on Wood et al. (2014) to Reverse Position and Find that Listing the Tucson Shovel-Nosed Snake Is Not Warranted (2014)***

Shortly after the publication of Wood et al. (2014), on August 26, 2014, the Service completed a Species Status Assessment (“SSA”), which it described as a “comprehensive biological status review.” 2-ER-154-247.

Contrary to decades of prior understanding that the species is restricted to a three-county range (Maricopa, Pinal, and Pima) in south-central Arizona, *see, e.g.*, Mahrtdt (2001), the SSA interprets Wood et al. (2014) to say that the Tucson shovel-nosed snake “occupies a much larger range than previously believed,” and is “found *throughout central and western Arizona* in Pinal, Maricopa, *Yavapai*, *Yuma*, Pima, and *La Paz* counties.” 2-ER-154, 158 (emphasis added).<sup>7</sup>

The Service’s newly defined range for the Tucson shovel-nosed snake “extends almost [200 miles] to the west and north” from the previous boundaries. 2-ER-193. This new range is approximately 4,943,728 acres larger than the previously-recognized range—a 274 percent increase in size. *Id.* The increased

---

<sup>7</sup> Notably, while relying on Wood et al. (2014) for its novel and aggressive redefinition of the Tucson shovel-nosed snake’s range, the SSA did not adopt Wood’s reclassification of the subspecies as *Chionactis annulata klauberi*, instead referring to it by the previous *C. occipitalis klauberi* designation. 2-ER-154.

range includes portions of the defined ranges of both Colorado and Mojave shovel-nosed snakes, as well as the intergrade zone between the Tucson and Colorado snakes. 2-ER-182. The SSA does not address the biological or conservation implications of these associated reductions in ranges for other subspecies, nor does it make any mention of the closing recommendation in Wood et al. (2014) that both “pure” and “hybrid” populations of Tucson shovel-nosed snakes, as well as the populations of Colorado shovel-nosed snakes with which it intergrades, be protected. 3-ER-259.

The SSA justifies this vast increase in the Tucson shovel-nosed snake’s range on an asserted disconnect between the genetic data collected by Wood et al. (2014) and the phenotypic (*i.e.*, visible physical) characteristics first used to define shovel-nosed subspecies and ranges. 2-ER-158 (“We recognize that there is considerable color pattern variation throughout the [newly-expanded] range of the Tucson shovel-nosed snake; however, the genetic data indicate that, despite the color pattern expressed, snakes previously thought to be a different subspecies within this range, are genetically Tucson-shovel nosed snakes.”). In doing so, the SSA did not address or acknowledge the repeated contrary observations in Wood et al. (2014) that the genetic data they collected was in fact generally *consistent with* the phenotypic characteristics used to define each snake’s geographic range.

3-ER-257 (noting “broadly concordant boundaries” between genetic data and color variation); 3-ER-259 (noting “broad (but not exclusive) geographic cohesion.”).

As a corollary of this redefined, greatly expanded range, the SSA also rejected previous studies conducted within the species’ long-understood three county range describing the species as a habitat specialist existing only in limited habitats. 2-ER-156. Instead, the SSA asserted that the Tucson shovel-nosed snake “appears to be a habitat generalist within the overall Sonoran Desertscrub habitat.” 2-ER-186. Unlike a habitat specialist that can only tolerate specific habitat requirements, a habitat generalist species can tolerate a wide range of environmental conditions. 2-ER-156.

In addition, more than 40 percent of the Service’s newly defined range is administered by the U.S. Bureau of Land Management (“BLM”). 2-ER-162. Unlike the private and State Trust Lands in the historically estimated range, almost all at risk of development, 3-ER-273, the Service describes these BLM lands “as specially managed ... to maintain their natural state,” and the Service “assume[s] that general habitat management of these specially managed BLM lands will contribute to maintenance of suitable habitat.” 2-ER-162.

Based on its redefinition of range size and habitat preferences, and the new, large expanses of public land not subject to development pressures, the Service concludes in the SSA that “the current condition of the Tucson shovel-nosed snake,



range wide, is more than adequate for what the subspecies needs to maintain long term viability.” 2-ER-218. These SSA findings are the foundation for the Service’s second 12-month finding, in September 2014, that reversed its prior findings and determined that listing the Tucson shovel-nosed snake under the ESA is not warranted. 2-ER-145-153.

**D. Scientific Critiques of the Service’s Not Warranted Finding and New Interpretations of Wood et al. (2014)**

The Service’s SSA findings redefining the snake’s range and habitat preferences were first publicly announced in the final not warranted finding, and thus not subject to any advance public notice and comment. 2-ER-145-153.

However, the not-warranted finding did invite the public to submit “any new information, materials, comments, or questions concerning this finding” to the Service. 2-ER-146.

**1. Dr. Rosen’s “Five Problems” Analysis (2015)**

In May 2015, Dr. Rosen—who, as noted, the Service itself had recognized as a leading expert on the species, 3-ER-286, provided the Service with a detailed written analysis identifying five central problems with the Service’s SSA and not warranted determination. 2-ER-131-144; 2-ER-131 (statement by Dr. Rosen that the “SSA Report is authoritatively cited or is the only basis presented by the Service in the ‘Not Warranted’ Finding to sustain statements and interpretation that I question in the present letter.”).

First, Dr. Rosen’s new analysis states that the SSA’s statement that the Tucson shovel-nosed snake “appears to be [a] habitat generalist” is a “misinterpretation.” 2-ER-132. Instead, Dr. Rosen provided his expert opinion that all Western shovel-nosed snakes, including the Tucson shovel-nosed snake, “are well-known habitat specialists, largely to entirely restricted to sand and sandy loam substrates and to valley floor and relatively level lower bajadas.” *Id.* He explained that, in fact, “no desert snake species in the region can be considered to specialize as closely to a definable macrohabitat category as does *C. annulata*.” *Id.* He further noted that correctly categorizing the species as a habitat specialist has important conservation implications: “[b]ecause the [Tucson shovel-nosed snake] is unable to persist in areas lacking in specialized habitat requirements, the snake will likely be extirpated in areas where these essential habitats are destroyed or fragmented through urbanization or other development.” *Id.*

Second, Dr. Rosen found that the SSA’s statement that surveyed Tucson shovel-nosed snake populations “are stable or show no declines” is “difficult to align ... with the demonstrated decline and apparent extirpation” of the species in Pima County, “where the most systematic surveys have been done.” 2-ER-133.

Dr. Rosen further identified the third and fourth problems as the Service’s failure to adequately recognize the species’ vulnerability to habitat fragmentation and reliance on inaccurate habitat modeling, respectively. 2-ER-134-136.

Lastly, and “most critically,” 2-ER-131, Dr. Rosen critiqued the “greatly expanded geographic distribution adopted by the Service” that it based on Wood et al. (2014). 2-ER-137-141. While acknowledging that Wood et al. (2014) “offers some support for expanding the snake’s range” into Maricopa County, 2-ER-137, and that the study’s discussion of the genetic and geographic history of the Western shovel-nosed snake “is complicated,” Dr. Rosen’s analysis found that Wood et al. (2014) “*unequivocally contradicts*” the vastly expanded range adopted in the SSA report. 2-ER-137 (emphasis added); *id.* (“Thus, the pivotal mapping adopted by the Service for the distribution of the [species] doesn’t agree with the published literature (Wood et al. 2014.”)). Moreover, Dr. Rosen’s analysis provided an interpretation of the maps and figures contained in Wood et al. (2014) (3-ER-251, Figure 1, and 3-ER-255, Figure 4), none of which depicted an expanded range encompassing portions of Yavapai, Yuma, and La Paz counties in western Arizona—*i.e.*, areas critical to the Service’s not warranted finding. 2-ER-137-140.

Dr. Rosen closed his analysis by recommending that the Service “re-evaluate the status of the [species] based on a narrower concept of the taxon—geographically restricted to northwestern Maricopa County, east-central Maricopa County, and Pinal County, and if the species can be found, in northeastern Pima County.” 2-ER-140.

## 2. *Habitat and Conservation Status Study (Bradley & Rosen (2020))*

In 2020, Dr. Rosen, along with Curtis Bradley, a senior scientist and mapping specialist at the Center, published a new study on the habitat and conservation status of the Tucson shovel-nosed snake (hereafter “Bradley & Rosen (2020)”).<sup>8</sup> 2-ER-119-127. The study found that the model used by the Service in its 2014 not-warranted determination yielded an estimated area of suitable habitat 2.4 times greater than the authors’ estimates. 2-ER-124. The authors identified several reasons for the Service’s overestimation of habitat in their model.

First, the Service’s model only includes two habitat variables—elevation and land cover—and neglects to include slope, which is an important variable because the snake is known to inhabit valley bottoms and not steep hillsides. 2-ER-124-125. In addition, the Service’s model includes areas of up to 1,500 meters (4,921 feet) in elevation, which is over twice the maximum elevation for any Tucson shovel-nosed snake record within Arizona. *Id.* Third, the Service relied on land cover to predict habitat. The authors found that variable to be lacking because climate variables that included precipitation and temperature performed better at predicting the snake’s habitat. *Id.* Finally, the Service’s model relied on snake

---

<sup>8</sup> The full citation to this study is: Curtis M. Bradley & Phillip C. Rosen, *Defining suitable habitat and conservation status for the Tucson shovel-nosed snake (Chionactis annulata klauberi) in the Sonoran Desert*, 33 *Sonoran Herpetol.* 130-137 (2020).

observations in La Paz County that were presumed to be Tucson shovel-nosed snakes based on limited DNA and morphological evidence. *Id.* The Service’s inclusion of these questionable records greatly expanded the range boundary for the species to the west, whereas the authors used a preponderance of evidence approach to determine the observations used in their model. *Id.*

**E. The Center’s Second Listing Petition (2020)**

Incorporating new information contained in Dr. Rosen’s “five problems” analysis, and Bradley & Rosen (2020), as well as new information concerning threats from proposed construction of an interstate highway, snake fungal disease, climate change, off-road vehicles, and wildfire driven by invasive species, the Center submitted a second petition to list the Tucson shovel-nosed snake on September 24, 2020, and requested adoption of “the expanded range indicated by [Wood et al. (2014)], including portions of Pima, Pinal, and Maricopa Counties,” but excluding Yavapai, Yuma, and La Paz counties in western Arizona. 2-ER-87-118.

**F. The Challenged September 29, 2021, 90-Day Finding**

On September 29, 2021, the Service issued a negative 90-day finding on the second petition, asserting that it did not contain any new and substantial information not previously considered indicating that listing the snake may be warranted. 86 Fed. Reg. 53937 (Sept. 29, 2021), 2-ER-21-25.

The 90-day finding acknowledged that the Center’s petition presented a much different understanding of the snake’s habitat range from that found by the Service and, in turn, that this disparity reflected vastly different interpretations of the Wood et al. (2014) study on which the Service had relied in reaching its not warranted finding. 2-ER-24 (“The petitioner[’s] interpretation is based on a different interpretation of that taxonomic revision described in [Wood et al. (2014)]”); 2-ER-25 (“The key difference between the petitioners’ conclusions ... and the conclusions in our 2014 finding relate to the difference in interpretation of the current range...”).

**G. The District Court’s Rejection of the Center’s Challenge to the Service’s Denial of Its Second Petition at the Initial 90-Day Finding Stage**

The Center filed this case in June 2022. 3-ER-354. The Center’s single claim, now at issue in this appeal, is that the Service’s conclusion that the Center’s petition did not present substantial information that listing the Tucson shovel-nosed snake under the ESA may be warranted was counter to the ESA and its implementing regulations. 2-ER-25.

The Center advanced three primary arguments that the Service’s denial was arbitrary and capricious. First, the Center argued that the listing petition was based on significant new information not previously considered—including Dr. Rosen’s “five problems” analysis and Rosen & Bradley (2020)—indicating that the Service

had misinterpreted Wood et al. (2014) in finding a vastly expanded range for the snake. I-ER-12.

The district court rejected this argument, stating that Rosen “cited no sources” in support of his “five problems” analysis and that he “relie[d] on portions” of Wood et al. (2014) “with which he agreed” and “ignore[d] portions with which he disagreed.” 1-ER-13. The district court found that the Service “had a rational basis for concluding” the Bradley & Rosen study also “offered no new or substantial information” because although the authors “reinterpreted” Wood et al. (2014), they “did not collect any of their own data, [n]or did they cite to more recent studies with new genetic findings ....” 1-ER-16-17.

Second, the Center argued that the Service applied an overly stringent standard in issuing its negative 90-day finding in the face of clear disagreement among expert scientists regarding interpretation of Wood et al. (2014). ECF-20 at 19-21. The district court rejected this argument on the grounds that Rosen’s analysis was not credible scientific information because it “discussed scientific evidence previously considered” by the Service and because Rosen presented “an unsupported classification of ‘pure’ TSNS snakes, which conflicted in part with the USGS study.” 1-ER-17-18.

Finally, the district court rejected the Center’s arguments that the Service failed to address new information not previously considered regarding a proposed

interstate highway and snake fungal disease. 1-ER-19. Tying the rejection to the previous parts of the decision, the district court found that the Center’s “concerns about Interstate 11 rest in its proposed narrowed range for the snake.” *Id.* Because the district court had found that the Service “was within its rights to reject” those concerns, it determined that the freeway development would “result[] in a minor loss of habitat when viewed in the context of [the Service’s] larger range for the snake.” *Id.* The district court further upheld the Service’s dismissal of the fungal disease as “a generic threat of disease in the ecosystem but not a specific threat to the Tucson shovel-nosed snake.” *Id.*

### **SUMMARY OF ARGUMENT**

The Service’s negative 90-day finding and the district court’s ruling upholding that finding both rest on an erroneous and overly stringent reading of the phrase “new information not previously considered” in the Service’s regulation concerning new listing petitions. The Service specifically stated during its promulgation of the regulation that “new,” in this context, can be a new analysis about existing information—which is precisely what occurred here. *See* 81 Fed. Reg. at 66474. (“Petitioners may similarly present a new analysis of existing data in support of their requests.”). Contrary to the district court ruling, there is no requirement in the plain language of the regulation or the agency’s



contemporaneous explanation of it that a petitioner must collect entirely new data to meet the new information standard.

To the contrary, the Service further explained when it issued the regulation that so long as the *analysis* is new and scientifically credible, it is appropriate for a petition to be based on existing information. 81 Fed. Reg. at 66480 (“By ‘new’ we mean that the information was not considered by the Services in the prior determination *or that the petitioner is presenting a different interpretation or analysis of that data.*”) (emphasis added). The Service recognized that there is value in reassessing data. *Id.* at 66474 (“Petitioners may similarly present a new analysis ... [that] could be based on discovery of an error in research regarding information previously considered by the Services.”). Both Dr. Rosen’s “five problems” analysis and Bradley & Rosen (2020) present new analyses and interpretations of Wood et al. (2014) that fundamentally differ from the Service’s interpretation, therefore meeting the regulatory new information standard.

The Service’s negative 90-day finding and the district court decision upholding that finding therefore conflict with the text, history, structure, and purpose of the Service’s petition regulation, and required the Center to present far more than what the ESA requires. The district court’s opinion suggests that a petitioner needs to collect new *data*, which has a narrower plain language meaning than new *information*. The district court further faulted Bradley & Rosen (2020)

for not being a peer-reviewed study, even though the Service specifically affirmed during rulemaking that substantial new information can include non-peer-reviewed information. 81 Fed. Reg. at 66472. The district court also suggested that the information presented needs to conclusively show that listing is warranted, even though this goes against the text and structure of the ESA, which states that 90-day findings determine only whether listing “may” be warranted.

The district court also found that the information the Center presented on a new proposed interstate highway was not “new” because the Service had previously considered threats of future development. 1-ER-19. In doing so, the district court upheld the Service’s improper reliance on a previous, hypothetical analysis to dismiss a newly proposed major construction project in the heart of the snake’s remaining range. The district court also misunderstood what “new” means in this context when it found that it was reasonable for the Service to dismiss new threats about snake fungal disease because “the generic threat of disease was previously considered” in the Service’s 2014 not-warranted finding. *Id.* Yet the Center’s second petition included references to newly documented disease in Arizona that the scientific community was not aware of in 2014.

It was arbitrary for the Service to conclude that the Center did not present substantial, new information, not previously considered, that listing the Tucson

shovel-nosed snake may be warranted. The district court’s rationale for upholding the Service’s decision does not withstand scrutiny.

### **STANDARD OF REVIEW**

Appellate courts generally review district court decisions on cross-motions for summary judgment de novo. *Guatay Christian Fellowship v. Cnty. of San Diego*, 670 F.3d 957, 970 (9th Cir. 2011). Federal agency decisions are reviewed pursuant to the Administrative Procedure Act (“APA”), which “requires a court to hold unlawful and set aside agency action, findings, and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Organized Vill. of Kake v. U.S. Dep’t of Agric.*, 795 F.3d 956, 966 (9th Cir. 2015) (en banc).

In evaluating agency decisions, courts must ensure that the agency has articulated a “rational connection between the facts found and the choice made.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). An agency’s action is arbitrary and capricious “if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Id.* “Further, an agency’s decision can be upheld only on the basis of the reasoning in that

decision.” *Anaheim Mem’l Hosp. v. Shalala*, 130 F.3d 845, 849 (9th Cir. 1997).

When determining the meaning of an agency’s regulation, “[u]nder the APA, a ‘reviewing court shall ... hold unlawful and set aside agency action, findings, and conclusions found to be ... not in accordance with law.’” *Attias v. Crandall*, 968 F.3d 931, 937 (9th Cir. 2020) (citing 5 U.S.C. § 706).

## **ARGUMENT**

### **I. THE SERVICE UNLAWFULLY ISSUED A NEGATIVE 90-DAY FINDING ON THE CENTER’S SECOND PETITION DESPITE THE PETITION’S INCLUSION OF NEW, SUBSTANTIAL INFORMATION THAT LISTING MAY BE WARRANTED**

The Service’s negative 90-day finding was arbitrary and capricious because the second listing petition provided the Service with substantial new information not previously considered, including analysis related to the Service’s fundamental misinterpretation of Wood et al. (2014) and information regarding a proposed interstate and snake fungal disease. 2-ER-21-25. The district court erroneously sided with the Service on this claim, primarily by adopting an overly stringent interpretation of “new information” at odds with the ESA, its implementing regulations, and applicable caselaw.

**A. The Text, Structure, History, and Purpose of the Service’s Listing Petition Regulations Demonstrate That The “New Information” Standard Has Broad and Flexible Meaning**

The ESA, as well as the Service’s implementing regulations, set forth a low bar for a positive 90-day finding, providing that the Service “shall make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action *may* be warranted.” 16 U.S.C. § 1533(b)(3)(A) (emphasis added); *see also* 50 C.F.R. § 424.14(h)(1). The substantial information standard means credible information that would lead a “reasonable person conducting an impartial scientific review [to] conclude that the action proposed in the petition may be warranted.” *Id.* § 424.14(h)(1)(i). When the Service has previously made a decision on a petition, the petition “generally would not be considered” to present substantial information “indicating that the action may be warranted *unless the petition provides new information not previously considered.*” *Id.* § 424.14(h)(1)(iii) (emphasis added).

In *Kisor v. Wilkie*, the Supreme Court acknowledged that it “has often deferred to agencies’ reasonable readings of genuinely ambiguous regulations”—referred to as *Auer* deference. 139 S. Ct. 2400, 2408 (2019) (citing *Auer v. Robbins*, 519 U.S. 452 (1997)). However, in *Kisor*, the Court significantly “cabined *Auer*’s scope in varied and critical ways,” thereby “maintain[ing] a strong

judicial role in interpreting rules” and highlighting that *Auer* deference “often doesn’t [apply].” *Id.* at 2418.

*Kisor* explains that “[f]irst and foremost, a court should not afford *Auer* deference unless the regulation is genuinely ambiguous.” *Id.* at 2415. To determine genuine ambiguity, a court “must exhaust all the traditional tools of construction” and “cannot wave the ambiguity flag just because it found the regulation impenetrable on first read.” *Id.* Instead, “a court must carefully consider the text, structure, history, and purpose of a regulation, in all the ways it would if it had no agency to fall back on,” as “[d]oing so will resolve many seeming ambiguities out of the box, without resort to *Auer* deference.” *Id.*; *see also Attias*, 968 F.3d at 937 (“If the regulation’s text is unambiguous, we give no deference to the agency’s interpretation ....”). Here, the text, structure, history, and purpose of the Service’s regulation governing 90-day findings on second listing petitions unambiguously demonstrates that the Center’s petition presented “new information” under the Service’s petition regulations.

The meaning of “new information not previously considered” was extensively and specifically discussed during the Service’s promulgation of its “Revisions to the Regulations for Petitions” on September 27, 2016. 81 Fed. Reg. 66462. As the Service specifically explained in the Final Rule, “[b]y ‘new’ we mean the information was not considered by the Service[] in the prior

determination, *or that the petitioner is presenting a different interpretation or analysis*” of existing studies or data. *Id.* at 66480 (emphasis added).

The Service further and specifically affirmed the flexibility and breadth of the term “new information” in its responses to comments on the proposed rule. For example, one commenter stated a concern that the “new information” requirement “could severely limit the ability to file [] petitions that assert flaws in the Service’s prior consideration of issues,” and emphasized that “[p]etitioners should be able to assert that information the Services previously used was misused, misrepresented, or misinterpreted.” *Id.* at 66474.<sup>9</sup> In response, the Service assured the public that the “rule will not limit the ability to file ... petitions,” and that the requirement was being added “to prevent the petition process from being used inefficiently—in effect, to voice disagreement with a previous determination ... without providing any new information *or analysis* relevant to the question at issue.” *Id.* (emphasis added). The Service then expressly stated that an “appropriate showing may include an explanation of *how information used in the previous analysis was misused, misrepresented, or misinterpreted.*” *Id.* (emphasis added); *see also id.* at 66473 (“[I]n the case of not-substantial 90-day findings (which are final agency

---

<sup>9</sup> The commentor was expressing concerns in the context of petitions to delist, but the new information standard applies equally to delisting or listing petitions, “where petitioners request an outcome that differs from the outcome reached in a previous Service finding or determination.” 81 Fed. Reg. at 66474.

actions), one remedy would be to submit a new petition with further justification and rationale for the requested action.”).

**B. The Service’s Finding that the Center’s Second Petition Did Not Present New Information Regarding the Service’s Interpretation of the Wood et al. (2014) Study Conflicts with the Agency’s Own Explanation of its Regulation**

The Center’s petition contained precisely the type of scientific analysis, critique, and interpretation that meets the new information standard under the Service’s contemporaneous explanation of its regulations. Both the Dr. Rosen “five problems” analysis and Bradley & Rosen (2020) contain extensive discussions—by scientists whose expertise has not been disputed—regarding how, in their view, the Service had “misused”, “misrepresented”, and “misinterpreted” Wood et al. (2014), while presenting “different analysis or interpretation of, or errors discovered in, the data, model or analytic methodology used in a previous finding.” 81 Fed. Reg. at 66474. This was sufficient to satisfy the “may be warranted” standard—particularly since the Service had never previously solicited or considered public comment on its reliance on Wood et al. (2014).

In upholding the Service’s negative 90-day finding, the district court applied an inappropriately heightened standard when it stated that new information cannot include a reinterpretation or assessment of existing data, while also demanding collection of new data. 1-ER-16 (“Rosen and Bradley reinterpreted portions of the USGS Study’s data but did not collect any of their own data.”); 1-ER-14, 17



(finding that Rosen’s “hypothesis was not new” because it “discussed scientific evidence previously considered by FWS” and addressed existing data in the Service’s SSA). As detailed *supra* in Section 1.A., the district court’s insistence that the “new information” standard can only be met by the collection of new data is unsupported by anything in the ESA itself. Nor is it consistent with the text, structure, or contemporaneous explanation of the Service’s own petition regulations.

The district court further erred where it found the Rosen analysis did not meet the new information standard because it “relied on pre-2014 studies ... including three studies he authored in 2003, 2004, and 2008.” 1-ER-13. Under the district court’s flawed reasoning, a competing analysis of the Service’s interpretation of an *existing study*, even where central to the agency’s decision to deny protections at the 90-day state as it did here, can never be considered new information unless also paired with post-decision scientific study. In discussing his earlier work and the SSA, Dr. Rosen explained to the Service how they misused, misrepresented, and misinterpreted the scientific literature on the Tucson shovel-nosed snake. 81 Fed. Reg. at 66474. The district court’s conclusion again conflicts with the Service’s specific affirmation that new information includes analysis of existing information. *Id.* at 66480.

The district court’s understanding also goes against the meaning and purpose of the Service’s regulations. As the Service explained, the purpose of the requirement for “new information not previously considered” is to prevent the petition process from being used inefficiently. *Id.* at 66474. The Service explained that such inefficiency would include bald assertions or disagreements without any analysis, interpretation, or discussion of errors. The information provided in the Center’s second petition includes extensive analysis, interpretation, and discussion of errors, particularly in relation to the Service’s interpretation of Wood et al. (2014). *Cf. Defs. of Wildlife v. U.S. Fish & Wildlife Serv.*, 584 F. Supp. 3d 812, 833 (N.D. Cal. 2022) (upholding negative 90-day finding where sources considered in first petition and second petition did not provide a new interpretation of those sources).

The phrase “new information not previously considered” was added to provide clarity to the prospective petitioner. 81 Fed. Reg. at 66462 (“The revised regulations pertaining to the petition process will provide greater clarity to the public on the petition-submission process, which will assist petitioners in providing complete petitions.”). By saying that a new analysis of existing information cannot satisfy the standard—even an analysis, as here, by a leading expert on the species—the Service’s finding, as sustained by the district court, has removed the clarity the Service said it was providing to petitioners by explaining what they

expect the phrase “new information not previously considered” to mean in practice. By telling the public one thing as to what can be in a listing (or delisting) petition but then rejecting the petition by applying a very different standard, the Service acted in an arbitrary and capricious manner. *Turlock Irrigation Dist. v. FERC*, 903 F.3d 862, 873 (9th Cir. 2018) (“[It is a breach of the requirement of reasoned decisionmaking to ‘apply[] ... a standard of proof which is in fact different from the ... standard formally announced.’”) (quoting *Allentown Mack Sales & Serv., Inc. v. NLRB*, 522 U.S. 359, 374 (1998)); *Allentown*, 522 U.S. at 375 (“Reasoned decisionmaking, in which the rule announced is the rule applied, promotes sound results, and unreasoned decisionmaking the opposite.”).

Indeed, the district court’s opinion also runs counter to Executive Order 13563, which states that an agency’s regulations should promote predictability, reduce uncertainty, and use the least burdensome tools for achieving regulatory ends. Exec. Order 13563 (Jan. 16, 2011). The Service has told the public that after receiving a not-substantial 90-day finding, in lieu of immediately bringing suit, a petitioner can instead submit a second petition “with further justification and rationale for the requested action.” 81 Fed. Reg. at 66473. Erecting an unduly high standard for new petitions not only contravenes what the agency told the public, but it also invites litigation that might otherwise be avoidable. In practice, what the Service is requiring is for the Center (and those similarly situated) to sue

immediately—rather than provide further information to the agency via the petition process and try to resolve the issue that way.

**C. The Service’s Finding that the Center’s Second Petition Did Not Present Substantial Information Regarding the Service’s Interpretation of Wood et al. (2014) Was Arbitrary**

Section 4 of the ESA structures the petition review process with two distinct levels of review: the 90-day “may be” warranted finding and the 12-month warranted or not warranted finding. 16 U.S.C. § 1533(b)(3)(A)-(B). The first stage of review, the 90-day finding, is an initial assessment of a petition under which the Service asks “whether the petition presents substantial scientific or commercial information that the petitioned action may be warranted.” 16 U.S.C. § 1533(b)(3)(A); 2-ER-29 (“Ninety-day findings represent the first step in a lengthy and rigorous process”). “Substantial information” means “credible scientific or commercial information in support of the petition’s claims such that a reasonable person conducting an impartial scientific review would conclude that the action proposed in the petition may be warranted.” 50 C.F.R. § 424.14(h)(1)(iii).

Only after making a positive 90-day finding does the Service “promptly commence a review of the status of the species concerned.” 16 U.S.C. § 1533(b)(3)(A). Because it is an initial assessment, “[s]ubstantial 90-day findings represent a relatively low threshold, requiring only that the petitioner provide information that listing may be warranted.” 2-ER-29; *see Buffalo Field Campaign*,

289 F. Supp. 3d at 106 (“The ‘substantial evidence’ standard applied at the 90-day finding period is not a rigorous one”); *Ctr. for Biological Diversity v. Kempthorne*, No. CV 07-0038-PHX-MHM, 2008 U.S. Dist. LEXIS 17517 (D. Ariz. Mar. 5, 2008), at \*25 (“[T]he 90-day review of a listing petition is a cursory review to determine whether a petition contains information that warrants a more in-depth review.”). As a district court within this Circuit explained, “[a]t the 90-day stage, the question is not whether the designation *is* warranted, only whether it *may* be.” *Ctr. for Biological Diversity v. Kempthorne*, No. C 06-04186 WHA, 2007 U.S. Dist. LEXIS 4816 (N.D. Cal. Jan. 19, 2007), at \*19 (emphasis in original).

Under the 90-day low threshold, a “reasonable person could find that an action ‘may be warranted’ even in the face of evidence cutting multiple ways.” *Id.* at \*11. Thus, “in cases of such contradictory evidence, the Service must defer to information that supports [the petitioners’] position,” including “where there is disagreement among reasonable scientists.” *Id.* at \*11, 20; *Buffalo Field Campaign*, 289 F. Supp. 3d at 110 (in choosing one study over another at the 90-day stage, “the Service appears to have taken it upon itself to resolve a disagreement among reasonable scientists, an observation echoed by arguments made it its brief defending the side it picked.”).<sup>10</sup>

---

<sup>10</sup> Because the 12-month finding is when the Service receives “feedback” from the public about “the accuracy, sufficiency, and relevance of any information

In this case, the record demonstrates that the Service arbitrarily determined that the Center’s second petition to list the Tucson shovel-nosed snake could not meet the 90-day may be warranted threshold despite disagreement among reasonable scientists regarding the Service’s interpretation of Wood et al. (2014) in relation to the snake’s range, habitat preferences, and other issues detailed in Dr. Rosen’s “five problems” analysis and Bradley & Rosen (2020). The 90-day finding itself expressly acknowledges this disagreement. 2-ER-25 (“The key difference between the petitioners’ conclusions ... and the conclusions in our 2014 finding relate to the difference in interpretation of the current range...”); *see also* 2-ER-80, 83 (agency email describing the Center’s petition as “largely on dispute of genetics/taxonomy and range.”); 2-ER-26 (agency email describing the Center’s petition as disagreeing “with our definition of current range”); 2-ER-64, 70 (stating Service’s disagreement with petitioner’s definition and interpretation of range, respectively).

The record contains numerous other examples demonstrating that the Service was not only aware of the disagreement in relation to the Center’s petition, but that *additional* scientists would agree with the petition’s competing interpretation of Wood et al. (2014). 2-ER-59, 61 (the Service admitting that its

---

considered in making the finding,” it is the appropriate stage for resolving scientific disputes. 81 Fed. Reg. at 66474.

finding may lead to “some controversy due to the disagreement in the interpretation of the range based on genetics,” that “biologists who agree with the other interpretation [would] care,” and that the “controversial issues” in this case “include the disagreement in the interpretation of the range based on genetics, and that controversy would likely come from [Plaintiff] and any biologist (and likely herpetologist) who agree with the interpretation.”); 2-ER-42 (memorandum to the Director of the Service explaining that the Center disagrees with the Service’s interpretation and that “[i]t is possible that other herpetologists may disagree with [the Service’s] interpretation.”). In “tak[ing] upon itself to resolve a disagreement among reasonable scientists,” the Service “applied an inappropriately heightened standard to the evaluation of [the Center’s] petition.” *Buffalo Field Campaign*, 289 F. Supp. 3d at 110-111.

Instead of properly acknowledging this reasonable scientific dispute by issuing a positive 90-day finding and moving on to a status review and the 12-month finding stage, the Service’s Petition Review Form (“Form”) stated it was “incorrect” for the Center to rely on color pattern. 2-ER-45-46. The Form is an internal document created by the Service that is supposed to track what was reviewed in the petition. 2-ER-56-57. To support the Service’s statement, the Form refers the reader to the Service’s interpretation in its SSA. 2-ER-46 (“Refer to our 2014 SSA for more information on the genetic analysis”). It provides no other

support for this statement besides its SSA. *Id.* Yet the very essence of the Center’s second petition was presenting new scientific analysis and interpretation that is fundamentally at odds with the SSA’s interpretation of the Wood et al. (2014) study.

The Form shows that the new information presented by the Center was automatically dismissed because of the difference in interpretation. 2-ER-46-57. Multiple draft iterations of the Form show the Service refer to the issue as a “disagreement.” 2-ER-64, 68, 70, 71.

Moreover, the Form omits Rosen’s “five problems” analysis as information that was reviewed at the 90-day finding stage. 2-ER-44-57. The Form did not say why the Rosen analysis was excluded—for instance, if the Service thought it was not credible. *Id.* The Form is supposed to include all the information evaluated in the petition. 2-ER-46 (“Below we present the information from the petition, our analysis of that information and our conclusion and petition finding...”). Internal emails show the Service received the Rosen analysis, referring to it as “the letter from Phil” and confirming receipt to the Center. 2-ER-86 (agency email from Tucson field office); 2-ER-77 (agency email confirming receipt of a flash drive with the supporting materials included with the petition). Yet there was no mention in either the 90-day finding or the Form of Dr. Rosen’s new analysis. 2-ER-21-25, 44-57. The Service includes other similar information in the Form, including a



letter also included in the Center’s petition from the Coalition for Sonoran Desert Protection, 2-ER-56, and earlier work from Dr. Rosen, 2-ER-57, but it did not evaluate the “five problems” analysis. 2-ER-56-57.

In sum, the Service did not state the Center’s position was incorrect, unreliable, or irrelevant. 2-ER-21-25. Instead, the Service characterized the Center’s position as limiting the range of the Tucson shovel-nosed snake by including snakes that share the same color pattern, which the Service concluded was not as good as their interpretation. 2-ER-25 (“[the Service’s] genetics only [approach] is a better scientific method.”).

If the Service can resolve genuine scientific disputes or “pick a side” at the 90-day stage, the 12-month finding stage—at which the Service is required to determine what the “best available” science actually supports,” 16 U.S.C. § 1533—becomes meaningless. This defeats the purpose of the ESA’s carefully structured framework. However, the district court not only upheld this arbitrary decision but then itself waded into the scientific dispute, criticizing Bradley & Rosen (2020) as “rest[ing] on an unsupported assumption about the snake’s range” by using a model “that met Rosen’s criteria for a ‘pure’ Tucson shovel-nosed snake.” 1-ER-15.

Yet unlike the Service’s interpretation of Wood et al. (2014), which finds no direct support in the study’s text, Dr. Rosen’s focus on “pure” Tucson snakes was a

clearly stated recommendation in the final, closing sentence of the study that “pure” and “hybrid” populations of both Tucson and Colorado shovel-nosed snakes be protected. 3-ER-259.<sup>11</sup> More importantly, the existence of this scientific dispute as to the correct understanding of the critical study on which the Service had relied to reject listing only highlights the arbitrary action of the Service in reaching its 90-day finding, and the district court’s error in failing to vacate and remand that decision. *Buffalo Field Campaign*, 289 F. Supp. 3d at 109 (“After all, if reasonable scientists disagree—and one of those positions would indicate listing is warranted—a reasonable person could choose to agree with the scientist who supports the petition and, as a result, that listing may be warranted.”).

The district court’s decision also based its decisions on additional demands not required at the 90-day stage, including taking issue with Bradley & Rosen (2020) for not being peer reviewed. 1-ER-15. For information to be “substantial,” the Service’s regulations require only that it be “credible.” 50 C.F.R. § 424.14(h)(1)(i). Credible information includes “all types of data” including “gray literature.” 81 Fed. Reg. at 66472. Merriam Webster defines “gray literature” as

---

<sup>11</sup> The district court also concluded that the Rosen analysis needed to explain why color pattern was “necessary” in defining the subspecies, that Dr. Rosen should have explained “why reliance on genetic evidence was scientifically inaccurate,” and that Bradley & Rosen (2020) should have investigated whether “genetics” are a scientifically “superior” method. 1-ER-10. None of this was required for the information presented to be “credible” or “substantial.”

“written material (such as a report) that is not published commercially or is not generally accessible.”<sup>12</sup> The Service’s definition is even broader, ending in “etc.” to show credible information can be other similar types of material: “... gray literature, traditional ecological knowledge, etc.” 81 Fed. Reg. at 66472. The district court misapprehended what is required at the 90-day stage, including the reasonable person standard. Bradley & Rosen (2020) was reviewed by experts in their field, including the lead author of Wood et al. (2014), the main study at issue surrounding the disagreement about the snake’s genetics. 2-ER-126. Dustin Wood’s review of Bradley & Rosen (2020) shows that the paper was reasonable to publish and that the study is credible. The lack of formal peer review of Bradley & Rosen (2000) does not remove it as a credible source of substantial new information under the Service’s regulations.

Yet, because the district court decided Bradley & Rosen (2020) was “unsupported” and needed to “cite to more recent studies with new genetic findings,” and because the authors did not “collect any of their own data,” the court decided the Service was “justified in not giving the study greater weight.” 1-ER-16. But the district court cannot apply an incorrect standard to justify the Service’s

---

<sup>12</sup> See *grey literature*, MERRIAM-WEBSTER.COM, <https://www.merriam-webster.com/dictionary/gray%20literature> (last visited April 5, 2024).

finding. The Service is allowed to change its mind, but it is not allowed to disregard its own rules or change their meaning when it wants to.

Although Defendants may try and allege otherwise, the Center is not arguing that the Service must “accept any and all positions that a petition advances,” or that the Service must “credit scientific studies it knows to be obsolete, wholly unreliable, or irrelevant.” *Buffalo Field Campaign*, 289 F. Supp. 3d at 111. If the Court upholds the Center’s arguments, “the Service will not be required to grant every petition that appears before it,” but would simply recognize the guiding principle that “it simply cannot resolve outstanding disputes between reasonable scientists over relevant matters in the course of a 90-day review.” *Id.* More to the point, the Service will merely be required to conform to what it has unequivocally told the public: that new *analyses* of existing data can be a basis for a valid petition.

**D. The Service’s Finding That the Center’s Second Petition Did Not Present New and Substantial Evidence Regarding New Interstate Highway Construction and Snake Fungal Disease Was Arbitrary**

The district court also incorrectly upheld the Service’s arbitrary dismissal of new information presented in the Center’s petition about threats from a newly proposed interstate highway and snake fungal disease.

The proposal to construct Interstate-11 did not exist when the Service made its prior finding. In its negative 90-day finding, the Service acknowledged that the

information the Center presented about Interstate-11 was new. 2-ER-25 (“[T]he petition provides some new information regarding specific impacts from proposed Interstate 11...”); 2-ER-27 (“The one difference is the proposed I-11 project. We go into more detail about the potential effects of I-11 on the species since it was not specifically addressed in the SSA or 12-month finding...”).

Yet this information was discounted because the Service found that in their “previous finding [they] considered the likely additional impacts of future development in this area” and had “estimated” that over half of the proposed area of the interstate would be lost. 2-ER-25, 27. The Service also dismisses the Center’s claims about increased threats from road mortality due to Interstate-11 by referring to studies in its SSA about country roads that have nothing to do with interstates. 2-ER-27; 2-ER-103; 2-ER-204. The Service concluded that the amount of destroyed habitat they did not consider is “inconsequential” because, using the SSA’s flawed interpretation of Wood et al. (2014) to justify a greatly expanded range for the Tucson shovel-nosed snake, they frame it as 0.01 percent of newly lost habitat. *Id.*

The Service cannot reasonably defer to a previous, hypothetical assessment in its prior finding, based on old modeling in its SSA, when it is confronted with an actual, new threat. The Bradley & Rosen (2020) habitat model mapped Interstate-11’s route for the first time and found it would cut through the snake’s “largest

remaining habitat blocks,” and that 60.3% of the snake’s remaining habitat is “vulnerable to loss from urbanization.” 2-ER-126. These are significant threats that show listing the snake may be warranted. This is the kind of information that the Service’s regulations encompass under the not previously considered standard: “considered” in the phrase “new information not previously considered” means that the “information or analysis was evaluated in a previous finding, status review, or listing determination.” 81 Fed. Reg. at 66474. And it is substantial because it was co-authored by a leading expert about Tucson shovel-nosed snakes (Dr. Rosen) and reviewed by the lead author of Wood et al. (2014). Yet the district court found that it was not new because the Service had already considered future developments in its SSA. 1-ER-19.

The district court found that even if Interstate-11 is a new threat, its impact would only be “minor” because it picked sides and agreed with the Service’s interpretation of Wood et al. (2014). *Id.* The district court’s and the Service’s assessments of the competing scientific interpretations of Wood et al. (2014) are counter to the ESA’s 90-day may be warranted threshold and the meaning of substantial new information under the Service’s petition regulations.

Finally, the district court dismissed new information about snake fungal disease. *Id.* The Center presented new sources in its petition that show that there has been an increase in reports of snake fungal disease in the United States,

including “severe” and “fatal” infections in wild snakes. 2-ER-106. The information presented shows that the disease is an “emerging snake pathogen” that invades the skin of snakes and can lead to death. 2-ER-128-129. Researchers note that the presence of this disease has “significant implications ... for wild snakes in Arizona.” *Id.* The district court dismissed this information as “generic.” 1-ER-19. The district court’s demand that the Rosen analysis refer to “new sources” is notably inconsistent with its dismissal of the new sources on snake fungal disease.

### **CONCLUSION**

The judgment of the district court should be reversed with instructions that the matter be remanded to the Service for a new decision.

**STATEMENT OF RELATED CASES**

Pursuant to 9th Cir. R. 28-2.6, the Center states that no related cases are pending.

/s/ Camila Cossío  
Camila Cossío

*Attorney for Plaintiff-Appellant*



## **ADDENDUM**

### **TABLE OF CONTENTS**

#### **Statutes**

##### **Administrative Procedure Act**

5 U.S.C. § 706.....	A2
---------------------	----

##### **Endangered Species Act**

16 U.S.C. § 1531(b) .....	A3
16 U.S.C. § 1532(16) .....	A4
16 U.S.C. § 1533(b) .....	A5
16 U.S.C. § 1540(g) .....	A12

#### **Regulations**

50 C.F.R. § 424.14(h) .....	A15
-----------------------------	-----

## **Administrative Procedure Act**

---

### **5 U.S.C. § 706 – Scope of Review**

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall—

- (1) compel agency action unlawfully withheld or unreasonably delayed; and
- (2) hold unlawful and set aside agency action, findings, and conclusions found to be—
  - (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
  - (B) contrary to constitutional right, power, privilege, or immunity;
  - (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;
  - (D) without observance of procedure required by law;
  - (E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or
  - (F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

## **Endangered Species Act – 16 U.S.C. §§ 1531-1544**

---

### **§ 1531(b) – Congressional findings and declaration of purposes and policy**

#### **(b) PURPOSES**

The purposes of this chapter are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.

## **Endangered Species Act – 16 U.S.C. §§ 1531-1544**

---

### **§ 1532(16) – Definitions**

For the purposes of this chapter—

**(16)** The term "species" includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.

## **Endangered Species Act – 16 U.S.C. §§ 1531-1544**

---

### **§ 1533(b) – Determination of endangered species and threatened species**

#### **(b) BASIS FOR DETERMINATIONS**

##### **(1)**

**(A)** The Secretary shall make determinations required by subsection (a)(1) solely on the basis of the best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction; or on the high seas.

**(B)** In carrying out this section, the Secretary shall give consideration to species which have been—

**(i)** designated as requiring protection from unrestricted commerce by any foreign nation, or pursuant to any international agreement; or

**(ii)** identified as in danger of extinction, or likely to become so within the foreseeable future, by any State agency or by any agency of a foreign nation that is responsible for the conservation of fish or wildlife or plants.

**(2)** The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

**(3)**

- (A)** To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of title 5, to add a species to, or to remove a species from, either of the lists published under subsection (c), the Secretary shall make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. If such a petition is found to present such information, the Secretary shall promptly commence a review of the status of the species concerned. The Secretary shall promptly publish each finding made under this subparagraph in the Federal Register.
- (B)** Within 12 months after receiving a petition that is found under subparagraph (A) to present substantial information indicating that the petitioned action may be warranted, the Secretary shall make one of the following findings:
  - (i)** The petitioned action is not warranted, in which case the Secretary shall promptly publish such finding in the Federal Register.
  - (ii)** The petitioned action is warranted, in which case the Secretary shall promptly publish in the Federal Register a general notice and the complete text of a proposed regulation to implement such action in accordance with paragraph (5).
  - (iii)** The petitioned action is warranted, but that—
    - (I)** the immediate proposal and timely promulgation of a final regulation implementing the petitioned action in accordance with paragraphs (5) and (6) is precluded by pending proposals to determine whether any species is an endangered species or a threatened species, and
    - (II)** expeditious progress is being made to add qualified species to either of the lists published under subsection (c) and to remove from such lists species for which the protections of this chapter are no longer necessary,

in which case the Secretary shall promptly publish such finding in the Federal Register, together with a description and evaluation of the reasons and data on which the finding is based.

**(C)**

- (i)** A petition with respect to which a finding is made under subparagraph (B)(iii) shall be treated as a petition that is resubmitted to the Secretary under subparagraph (A) on the date of such finding and that presents substantial scientific or commercial information that the petitioned action may be warranted.
- (ii)** Any negative finding described in subparagraph (A) and any finding described in subparagraph (B)(i) or (iii) shall be subject to judicial review.
- (iii)** The Secretary shall implement a system to monitor effectively the status of all species with respect to which a finding is made under subparagraph (B)(iii) and shall make prompt use of the authority under paragraph 7 1 to prevent a significant risk to the well being of any such species.

**(D)**

- (i)** To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of title 5, to revise a critical habitat designation, the Secretary shall make a finding as to whether the petition presents substantial scientific information indicating that the revision may be warranted. The Secretary shall promptly publish such finding in the Federal Register.
- (ii)** Within 12 months after receiving a petition that is found under clause (i) to present substantial information indicating that the requested revision may be warranted, the Secretary shall determine how he intends to proceed with the requested revision, and shall promptly publish notice of such intention in the Federal Register.

- (4) Except as provided in paragraphs (5) and (6) of this subsection, the provisions of section 553 of title 5 (relating to rulemaking procedures), shall apply to any regulation promulgated to carry out the purposes of this chapter.
- (5) With respect to any regulation proposed by the Secretary to implement a determination, designation, or revision referred to in subsection (a)(1) or (3), the Secretary shall—

  - (A) not less than 90 days before the effective date of the regulation—

    - (i) publish a general notice and the complete text of the proposed regulation in the Federal Register, and
    - (ii) give actual notice of the proposed regulation (including the complete text of the regulation) to the State agency in each State in which the species is believed to occur, and to each county, or equivalent jurisdiction in which the species is believed to occur, and invite the comment of such agency, and each such jurisdiction, thereon;
  - (B) insofar as practical, and in cooperation with the Secretary of State, give notice of the proposed regulation to each foreign nation in which the species is believed to occur or whose citizens harvest the species on the high seas, and invite the comment of such nation thereon;
  - (C) give notice of the proposed regulation to such professional scientific organizations as he deems appropriate;
  - (D) publish a summary of the proposed regulation in a newspaper of general circulation in each area of the United States in which the species is believed to occur; and
  - (E) promptly hold one public hearing on the proposed regulation if any person files a request for such a hearing within 45 days after the date of publication of general notice.



**(6)**

**(A)** Within the one-year period beginning on the date on which general notice is published in accordance with paragraph (5)(A)(i) regarding a proposed regulation, the Secretary shall publish in the Federal Register—

**(i)** if a determination as to whether a species is an endangered species or a threatened species, or a revision of critical habitat, is involved, either—

**(I)** a final regulation to implement such determination

**(II)** a final regulation to implement such revision or a finding that such revision should not be made,

**(III)** notice that such one-year period is being extended under subparagraph (B)(i), or

**(IV)** notice that the proposed regulation is being withdrawn under subparagraph (B)(ii), together with the finding on which such withdrawal is based; or

**(ii)** subject to subparagraph (C), if a designation of critical habitat is involved, either—

**(I)** a final regulation to implement such designation, or

**(II)** notice that such one-year period is being extended under such subparagraph.

**(B)**

**(i)** If the Secretary finds with respect to a proposed regulation referred to in subparagraph (A)(i) that there is substantial disagreement regarding the sufficiency or accuracy of the available data relevant to the determination or revision concerned, the Secretary may extend the one-year period specified in subparagraph (A) for not more than six months for purposes of soliciting additional data.

- (ii) If a proposed regulation referred to in subparagraph (A)(i) is not promulgated as a final regulation within such one-year period (or longer period if extension under clause (i) applies) because the Secretary finds that there is not sufficient evidence to justify the action proposed by the regulation, the Secretary shall immediately withdraw the regulation. The finding on which a withdrawal is based shall be subject to judicial review. The Secretary may not propose a regulation that has previously been withdrawn under this clause unless he determines that sufficient new information is available to warrant such proposal.
    - (iii) If the one-year period specified in subparagraph (A) is extended under clause (i) with respect to a proposed regulation, then before the close of such extended period the Secretary shall publish in the Federal Register either a final regulation to implement the determination or revision concerned, a finding that the revision should not be made, or a notice of withdrawal of the regulation under clause (ii), together with the finding on which the withdrawal is based.
- (C) A final regulation designating critical habitat of an endangered species or a threatened species shall be published concurrently with the final regulation implementing the determination that such species is endangered or threatened, unless the Secretary deems that—
  - (i) it is essential to the conservation of such species that the regulation implementing such determination be promptly published; or
  - (ii) critical habitat of such species is not then determinable, in which case the Secretary, with respect to the proposed regulation to designate such habitat, may extend the one-year period specified in subparagraph (A) by not more than one additional year, but not later than the close of such additional year the Secretary must publish a final regulation, based on such data as may be available at that time, designating, to the maximum extent prudent, such habitat.

- (7) Neither paragraph (4), (5), or (6) of this subsection nor section 553 of title 5 shall apply to any regulation issued by the Secretary in regard to any emergency posing a significant risk to the well-being of any species of fish or wildlife or plants, but only if—
- (A) at the time of publication of the regulation in the Federal Register the Secretary publishes therein detailed reasons why such regulation is necessary; and
- (B) in the case such regulation applies to resident species of fish or wildlife, or plants, the Secretary gives actual notice of such regulation to the State agency in each State in which such species is believed to occur.

Such regulation shall, at the discretion of the Secretary, take effect immediately upon the publication of the regulation in the Federal Register. Any regulation promulgated under the authority of this paragraph shall cease to have force and effect at the close of the 240-day period following the date of publication unless, during such 240-day period, the rulemaking procedures which would apply to such regulation without regard to this paragraph are complied with. If at any time after issuing an emergency regulation the Secretary determines, on the basis of the best appropriate data available to him, that substantial evidence does not exist to warrant such regulation, he shall withdraw it.

- (8) The publication in the Federal Register of any proposed or final regulation which is necessary or appropriate to carry out the purposes of this chapter shall include a summary by the Secretary of the data on which such regulation is based and shall show the relationship of such data to such regulation; and if such regulation designates or revises critical habitat, such summary shall, to the maximum extent practicable, also include a brief description and evaluation of those activities (whether public or private) which, in the opinion of the Secretary, if undertaken may adversely modify such habitat, or may be affected by such designation.

**Endangered Species Act – 16 U.S.C. §§ 1531-1544**

---

**§ 1540(g) – Penalties and enforcement****(g) CITIZEN SUITS**

- (1) Except as provided in paragraph (2) of this subsection any person may commence a civil suit on his own behalf—
  - (A) to enjoin any person, including the United States and any other governmental instrumentality or agency (to the extent permitted by the eleventh amendment to the Constitution), who is alleged to be in violation of any provision of this chapter or regulation issued under the authority thereof; or
  - (B) to compel the Secretary to apply, pursuant to section 1535(g)(2)(B)(ii) of this title, the prohibitions set forth in or authorized pursuant to section 1533(d) or 1538(a)(1)(B) of this title with respect to the taking of any resident endangered species or threatened species within any State; or
  - (C) against the Secretary where there is alleged a failure of the Secretary to perform any act or duty under section 1533 of this title which is not discretionary with the Secretary.

The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce any such provision or regulation, or to order the Secretary to perform such act or duty, as the case may be. In any civil suit commenced under subparagraph (B) the district court shall compel the Secretary to apply the prohibition sought if the court finds that the allegation that an emergency exists is supported by substantial evidence.

**(2)**

- (A) No action may be commenced under subparagraph (1)(A) of this section—

- (i) prior to sixty days after written notice of the violation has been given to the Secretary, and to any alleged violator of any such provision or regulation;
- (ii) if the Secretary has commenced action to impose a penalty pursuant to subsection (a) of this section; or
- (iii) if the United States has commenced and is diligently prosecuting a criminal action in a court of the United States or a State to redress a violation of any such provision or regulation.

**(B)** No action may be commenced under subparagraph (1)(B) of this section—

- (i) prior to sixty days after written notice has been given to the Secretary setting forth the reasons why an emergency is thought to exist with respect to an endangered species or a threatened species in the State concerned; or
- (ii) if the Secretary has commenced and is diligently prosecuting action under section 1535(g)(2)(B)(ii) of this title to determine whether any such emergency exists.

**(C)** No action may be commenced under subparagraph (1)(C) of this section prior to sixty days after written notice has been given to the Secretary; except that such action may be brought immediately after such notification in the case of an action under this section respecting an emergency posing a significant risk to the well-being of any species of fish or wildlife or plants.

**(3)**

- (A)** Any suit under this subsection may be brought in the judicial district in which the violation occurs.
- (B)** In any such suit under this subsection in which the United States is not a party, the Attorney General, at the request of the Secretary, may intervene on behalf of the United States as a matter of right.

- (4) The court, in issuing any final order in any suit brought pursuant to paragraph (1) of this subsection, may award costs of litigation (including reasonable attorney and expert witness fees) to any party, whenever the court determines such award is appropriate.
- (5) The injunctive relief provided by this subsection shall not restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any standard or limitation or to seek any other relief (including relief against the Secretary or a State agency).

## Code of Federal Regulations, Title 50, Part 424.14

---

### 50 C.F.R. § 424.14(h) – Petitions

***(h) Findings on petitions to add or remove a species from the lists, or change the listed status of a species.***

- (1)** To the maximum extent practicable, within 90 days of receiving a petition to add a species to the lists, remove a species from the lists, or change the listed status of a species, the Services will make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. The Services will publish the finding in the Federal Register.
  - (i)** For the purposes of this section, “substantial scientific or commercial information” refers to credible scientific or commercial information in support of the petition's claims such that a reasonable person conducting an impartial scientific review would conclude that the action proposed in the petition may be warranted. Conclusions drawn in the petition without the support of credible scientific or commercial information will not be considered “substantial information.”
  - (ii)** In reaching the initial finding on the petition, the Services will consider the information referenced at paragraphs (c), (d), and (g) of this section. The Services may also consider information readily available at the time the determination is made. The Services are not required to consider any supporting materials cited by the petitioner if the cited document is not provided in accordance with paragraph (c)(6) of this section.
  - (iii)** The “substantial scientific or commercial information” standard must be applied in light of any prior reviews or findings the Services have made on the listing status of the species that is the subject of the petition. Where the Services have already conducted a finding on, or review of, the listing status of that species (whether in response to a petition or on the Services' own initiative), the Services will evaluate any petition received thereafter seeking to list, delist, or reclassify that species to determine whether a reasonable person conducting an impartial scientific review would

conclude that the action proposed in the petition may be warranted despite the previous review or finding. Where the prior review resulted in a final agency action, a petitioned action generally would not be considered to present substantial scientific and commercial information indicating that the action may be warranted unless the petition provides new information not previously considered.

- (2) If the Services find that a petition presents substantial information indicating that the petitioned action may be warranted, the Services will commence a review of the status of the species concerned. At the conclusion of the status review and within 12 months of receipt of the petition, the Services will make one of the following findings:
  - (i) The petitioned action is not warranted, in which case the Service shall publish a finding in the Federal Register.
  - (ii) The petitioned action is warranted, in which case the Services shall publish in the Federal Register a proposed regulation to implement the action pursuant to § 424.16; or
  - (iii) The petitioned action is warranted, but:
    - (A) The immediate proposal and timely promulgation of a regulation to implement the petitioned action is precluded because of other pending proposals to list, delist, or change the listed status of species; and
    - (B) Expeditious progress is being made to list, delist, or change the listed status of qualified species, in which case such finding will be published in the Federal Register together with a description and evaluation of the reasons and data on which the finding is based. The Secretary will make any determination of expeditious progress in relation to the amount of funds available after complying with nondiscretionary duties under section 4 of the Act and court orders and court-approved settlement agreements to take actions pursuant to section 4 of the Act.



- (3) If a finding is made under paragraph (h)(2)(iii) of this section with regard to any petition, the Services will, within 12 months of such finding, again make one of the findings described in paragraph (h)(2) of this section with regard to such petition.

**CERTIFICATE OF SERVICE**

I, Camila Cossío, certify that today, April 10, 2024, I electronically filed the foregoing Brief of Plaintiff-Appellant with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system. All participants in the case are registered CM/ECF users and will be served by the appellate CM/ECF system.

/s/ Camila Cossío  
Camila Cossío

*Attorney for Plaintiff-Appellant*

**UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT**

**Form 8. Certificate of Compliance for Briefs**

Instructions for this form: <http://www.ca9.uscourts.gov/forms/form08instructions.pdf>

**9th Cir. Case Number(s)**

I am the attorney or self-represented party.

**This brief contains**  **words, including**  **words**

manually counted in any visual images, and excluding the items exempted by FRAP 32(f). The brief's type size and typeface comply with FRAP 32(a)(5) and (6).

I certify that this brief (*select only one*):

- ☒ complies with the word limit of Cir. R. 32-1.
- ☐ is a **cross-appeal** brief and complies with the word limit of Cir. R. 28.1-1.
- ☐ is an **amicus** brief and complies with the word limit of FRAP 29(a)(5), Cir. R. 29-2(c)(2), or Cir. R. 29-2(c)(3).
- ☐ is for a **death penalty** case and complies with the word limit of Cir. R. 32-4.
- ☐ complies with the longer length limit permitted by Cir. R. 32-2(b) because (*select only one*):
  - ☐ it is a joint brief submitted by separately represented parties.
  - ☐ a party or parties are filing a single brief in response to multiple briefs.
  - ☐ a party or parties are filing a single brief in response to a longer joint brief.
- ☐ complies with the length limit designated by court order dated .
- ☐ is accompanied by a motion to file a longer brief pursuant to Cir. R. 32-2(a).

**Signature**

**Date**

(use "s/[typed name]" to sign electronically-filed documents)

Feedback or questions about this form? Email us at [forms@ca9.uscourts.gov](mailto:forms@ca9.uscourts.gov)